

What is claimed:

1. A semiconductor fabrication and testing process comprising:

providing a semiconductor wafer having an array of any shape of exposed metal contact
pads or metal bumps; and
cleaning said exposed metal contact pads or metal bumps prior to wafer probing.

2. The process of claim 1 wherein the said cleaning is accomplished by sputtering with
argon Ar.

3. The process of claim 1 wherein the said process is accomplished by sputtering with
helium He.

4. The process of claim 1 wherein the said process is accomplished by sputtering with neon
Ne.

5. The process of claim 1 wherein the said process is accomplished by sputtering with a
mixture of argon Ar helium He and neon Ne.

6. The process of claim 1 wherein the said process is accomplished by ion milling.

7. A semiconductor wafer fabrication and testing process comprising:

providing a semiconductor wafer having an array of any shape of exposed metal
bumps; and

25 cleaning said exposed metal bumps prior to wafer probing.

8. The process of claim 7 wherein the exposed metal bumps are tin Sn.

9. The process of claim 7 wherein the exposed metal bumps are tin Sn alloy.

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10. The process of claim 7 wherein said cleaning is accomplished by sputtering with argon
Ar.

11. The process of claim 7 wherein said cleaning is accomplished by sputtering with helium
35 He.

12. The process of claim 7 wherein said cleaning is accomplished by sputtering with neon
Ne.

40 13. The process of claim 7 wherein said cleaning process is accomplished by sputtering with
a mixture of argon Ar, helium He, and neon Ne.

14. The process of claim 7 wherein said cleaning is accomplished by ion milling.

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